IN THE CLAIMS

1. (currently amended) A method for introducing genetic material into plants, comprising:

preparing a first plant transformed with a heterologous nucleic acid having 5' and 3' excisable flanking sequences that comprise a transposable element, and that allow movement of said heterologous nucleic acid from one genome to another;

crossing a second plant and the transformed first plant, wherein said first and second plants, upon crossing, produce unstable progeny or demonstrate preferential segregation or sorting out; and

selecting progeny of said second plant of (b) which contain said heterologous nucleic acid;

wherein said first plant, said second plant or both said first plant and said second plant produce a transposase specific to said transposable element.

2. (cancelled)

3. (currently amended) The method of claim 1, wherein said ~~5' and 3' excisable flanking sequences are~~ heterologous nucleic acid comprises a recombination site~~s~~ and wherein said first plant, said second plant or both said first and second plants produce a recombinase specific to said recombination site~~s~~.

4. (original) The method of claim 1, wherein said first plant is *Tripsacum* and said second plant is maize.

5. (original) The method of claim 1, wherein said first plant is *Tripsacum* and said second plant is wheat.

6. (original) The method of claim 1, wherein said first plant is *Tripsacum* and said second plant is barley.

7. (original) The method of claim 1 wherein said first plant is *Tripsacum* and said second plant is oat.

8. (original) The method of claim 1 wherein said first plant is *Orychophragmus* and said second plant is a crucifer.

9. (original) The method of claim 1 wherein said first plant is *Arabidopsis* and said second plant is a crucifer.

10. (original) The method of claim 8 wherein said crucifer is canola.

11. (original) The method of claim 1, wherein said first plant is *Glycine tomentella* and said second plant is soybean.

12. (original) The method of claim 1, wherein said first plant is *Solanum phreja* and said second plant is potato.

13. (original) The method of claim 1, wherein said first plant is maize and said second plant is wheat.

14. (original) The method of claim 1, wherein said first plant is maize and said second plant is barley.

15. (original) The method of claim 1, wherein said first plant is maize and said second plant is oats.

16. (original) The method of claim 1, wherein said first plant is *Pennisetum* and said second plant is wheat.

17. (original) The method of claim 1, wherein said first plant is *Pennisetum* and said second plant is barley.

18. (original) The method of claim 1, wherein said first plant is *Hordeum bulbosum* and said second plant is barley.

19. (original) The method of claim 1, wherein said first plant is *Hordeum bulbosum* and said second plant is wheat.

20. (original) The method of claim 1, wherein said first plant is *Oryza minuta* and said second plant is rice.

21. (original) The method of claim 1, wherein said first plant is *Nicotiana dilguta* and said second plant is *Nicotiana tabacum*.

22. (original) The method of claim 1, wherein one or both said first and second plants is cotton carrying a *Se* semigamy mutation.

23. (original) The method of claim 1, wherein one of said first and second plants is soybean carrying a *ms* mutation causing polyembryony.

24. (original) The method of Claim 1, wherein said first plant is *Arabidopsis*.

25. (withdrawn) A method for introducing genetic material into plants, comprising:

(a) preparing a cell or protoplast of a first plant transformed with a heterologous nucleic acid having 5' and 3' excisable flanking sequences that allow movement of said heterologous nucleic acid from one genome to another;

(b) fusing said cell or protoplast with a cell or protoplast of a second plant to produce a fused cell or a fused protoplast, wherein said first and second plants, upon crossing, produce unstable progeny or demonstrate segregation preferential or sorting out;

(c) regenerating whole plants from the fused cell or the fused protoplast; and

(d) selecting progeny of said regenerated plants of (c) which contain said heterologous nucleic acid.

26. (withdrawn) The method of claim 25, wherein said 5' and 3' excisable flanking sequences comprise a recombination site.

27. (withdrawn) The method of claim 25, wherein said fusing is conducted in medium containing a recombinase specific for said recombination site.

28. (withdrawn) The method of claim 25, wherein said first plant species, said second plant species or both said first and second plant species produce a recombinase specific to said recombination sites.

29. (withdrawn) The method of claim 25, wherein said 5' and 3' excisable flanking sequences comprise a transposable element,

and wherein said first plant, said second plant or both said first plant and said second plants produce a transposase specific to said transposable element.

30. (withdrawn) The method of claim 25 wherein said first plant is *Arabidopsis* and said second plant is cotton.

31. (withdrawn) The method of claim 25 wherein said first plant is *Arabidopsis* and said second plant is soybean.

32. (withdrawn) The method of claim 25 wherein said first plant is *Arabidopsis* and said second plant is rice.

33. - 35. (cancelled)

36. (withdrawn) A fused cell or fused protoplast produced by the method of Claim 25(b).